

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Art Unit: 1639
	)	
THISTED, et al.	)	Examiner: LUNDGREN, J.
	)	
Serial No.: 10/572,644	)	Washington, D.C.
	)	
Filed: August 25, 2008	)	July 29, 2009
	)	
For: A METHOD FOR OBTAINING	)	Docket No.: THISTED=1A
STRUCTURAL INFORMATION	)	
CONCERNING AN ENCODED...	)	Confirmation No.: 4397

ELECTION WITH TRAVERSE

U.S. Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

S i r :

1. In response to the species restriction mailed February 4, 2009, applicants makes the following species elections, all with traverse.

A. "category" of molecular target (reference to those listed in paragraph [0169] of published application):

Applicants elect "a protein". If further specificity is required, applicants elect "an enzyme". If still further specificity is required, applicants elect "a kinase".

The only claim which addresses the nature of the target is 19, and it merely requires a target "of a biological origin". Hence, all of claims 1-20 are deemed generic to molecular targets.

B. species of association between molecular target and the target oligonucleotide (reference to paragraphs [0174-0175]):

Applicants elect "covalent linkage". If further specificity is required, applicants elect a "cleavable covalent linkage".

All of claims 1-20 are generic to the choice of target/target oligonucleotide association.

*C. species of bifunctional complex (e.g. phage)*

The species restriction is not understood, because "phage" is not an example of a bifunctional complex. The complex comprises an encoded molecule (the display molecule of D) and an identifier oligonucleotide. See P4, L16-19, and P8, L25-30; and lines 6-8 of claim 1.

Since we specify the encoded molecule below (in answer to D), we elect a bifunctional complex by also specifying the identifier oligonucleotide.

Because of the examiner's misunderstanding of the complex, we do not know what specificity is required. In the interest of compact prosecution, we elect that the identifier oligonucleotide is a series of naturally occurring nucleotides. If further specificity is required we elect DNA. See discussion at pp. 26-30.

Claim 10 requires that the identifier oligo uniquely identify the display molecule but doesn't otherwise limit it.

The claims generic to or otherwise reading upon the elected complex are the same as for D below.

The only reference to phage in the specification are at pages 61 and 66. The phage of page 61 can be considered to be a means of displaying the complex to a target, rather than the complex itself. The phage of page 66 displays the target.

To the extent that the reference to phage is construed as a requirement that we elect the display system, we elect that the library of complexes is displayed to the target as free (soluble) complexes.

All of claims 1-20 are generic to the elected complex.

*D. a species of display molecule (e.g. polypeptide)*

Applicants elect benzodiazepines.

Claims 1-6 and 9-20 do not address the nature of the display (encoded) molecule and hence are deemed generic. Claims 7 and 8 merely exclude alpha-polypeptides and nucleic acids respectively, and thus read on the elected species.

*E. two or more chemical entities used to produce the display molecule*

We have elected display molecules which are benzodiazepines. These are characterized as comprising a benzene ring fused to a diazepine ring. The specification does not discuss benzodiazepines in any further detail. Benzodiazepine libraries per se are known in the art, see Bunin (1994) and Bunin (1996).

We elect that one chemical entity is a benzodiazepine and the other chemical entity is C<sub>1</sub>-C<sub>6</sub> alkyl per P36, L16. If still further specificity is required, the other chemical entity is methyl. Should we need to elect the building block which transfers the chemical entity to the benzodiazepine, we elect the one on P36, with CE being the elected chemical entity. The receiving group of the benzodiazepine could be a hetero nitrogen or an electronegative carbon, per P36, L7-11.

All claims are generic.

*F. species of link between display molecule and identifier oligonucleotide*

Applicants elect "PC Spacer Phosphoramidite". All claims are generic.

2. The species restriction is traversed as premature. The instant application is the national stage of a PCT application, so PCT unity rules apply.

The Examiner asserts

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: each of the species are chemically and/or functionally distinct.

However, in PCT practice, the chemical or functional

distinctness of species is irrelevant if they are unified by a generic claim.

PCT Administrative Instructions, Annex B, paragraph (c) explains that "unity has to be considered in the first place only in relation to the independent claims...." As stated in subparagraph (c)(i), "no problem arises in the case of a genus/species situation where the genus claim avoids the prior art".

Hence, it is incumbent on the examiner to do a prior art search. If the genus claim appears free of the prior art, no species restriction is proper.

If prior art is found, the examiner may make an a posteriori holding of lack of unity under subparagraph (c)(ii). However, the holding must be justified by citation of prior art and explanation of how it anticipates or renders obvious the generic claims.

Thus, in contradistinction to domestic restriction practice, in which the examiner can impose a species restriction before performing the search initially directed just to that species, and rejoin the species only if a generic claims is found allowable, in PCT practice the examiner must find prior art and articulate a proper rejection of the generic claim before requiring a species election.

3. The species restriction is also traversed on the grounds that in fact at least one generic claim is allowable over the prior art.

In this regard, applicants note that the International Preliminary Report on Patentability (copy enclosed) prepared by EPO found that PCT claims 1-62 possessed both novelty and inventive step. The instant claims 1-20 are identical to PCT claims 1-20.

4. The species restriction C is further traversed on the ground that it appears to be based on a fundamental

USSN - 10/572,644

misunderstanding of the nature of the complex.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By: 

Iver P. Cooper  
Reg. No. 28,005

Enclosure  
-IPRP

624 Ninth Street, N.W.  
Washington, D.C. 20001  
Telephone: (202) 628-5197  
Facsimile: (202) 737-3528  
IPC:lms  
G:\ipc\g-i\hoib\Thisted1A\thisted1a.pto election traverse.wpd